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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,381	03/06/2001	Paul E. Newson	MSFT-0282/163948.1	3314
27372	7590	10/14/2004	EXAMINER	
WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP ATTENTION: STEVEN J. ROCCI, ESQ. ONE LIBERTY PLACE, 46TH FLOOR PHILADELPHIA, PA 19103			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/800,381	<b>Applicant(s)</b> NEWSON ET AL.	
	<b>Examiner</b> Derrick W. Ferris	<b>Art Unit</b> 2663	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-24 is/are rejected.
- 7) ☒ Claim(s) 17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/03, 5/01</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-7, 9-16, and 19-24** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,700,895 B1 to *Kroll*.

As to **claim 1**, see e.g., figure 5 where the buffer associated with a length of delay is jitter buffer 174. Packets are inserted and removed from the buffer based on a length of play. In particular, a watermark (WM) value is used to determine when packets should be removed (i.e., when said length of play of packet is about the same as said length of delay) based on the steady state operation. Tracking reproduction errors associated with said length of delay and adjusting said current length to compensate for said reproduction errors is taught as part of a frame loss rate (step 280), e.g., see frames that overflow due to an arriving burst of frames. It is also noted that examiner has taken a reasonable but broad interpretation of the term “reproduction error” in view of applicant’s specification.

As to **claim 2**, the buffer 174 is based on transmission jitter.

As to **claim 3**, the length of the buffer is dynamically modified, see e.g., column 6, lines 22-26.

As to **claims 4-5**, reordering packets is taught as part of step 108 since packets are stored based on the sequence number (i.e., order).

As to **claims 6-7**, some packets not in order may be discarded, e.g., see step 106.

As to **claim 9**, once a packet is discarded, the next available packet is placed into the buffer assuming the buffering criterion is met (i.e., a lost packet is replaced by an next available packet).

As to **claim 10**, see e.g., figure 6 where a target error rate is a desired frame loss and the computed error rate is based on process 200 for a particular buffer size. Should the comparison not be desirable then a second comparison is made using a second error rate with a different or second buffer size.

As to **claim 11**, the desired length is selected such that it is the closest, see e.g., figure 6 (i.e., if  $X=3$  is selected then  $X=3$  is numerically closer than  $X=2$ ).

As to **claims 12-15**, the increment is 1 but is set based on the threshold, see e.g., column 6, lines 10-18. Also see e.g., column 11, lines 8-24.

As to **claim 16**, the boundary value is based on the threshold and thus bounded.

As to **claim 19**, since the frame loss rate contains errors which determine the length of the buffer, the target error rate is a function of the length of delay.

As to **claims 20-21**, although one packet per frame is used (i.e., a fixed length), other situations are possible which would make packets variable in length, see e.g., column 3, lines 62-64.

As to **claim 22**, see similar rejection to claim 1.

As to **claim 23**, see similar rejection to claim 2.

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As to **claim 24**, see similar rejection to claim 1.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,700,895 B1 to *Kroll* in view of U.S. Patent No. 6,658,027 B1 to *Kramer et al.* ("*Kramer*").

As to **claim 8**, *Kroll* may be silent or deficient to the further limitation of replacing a lost packet with an empty packet. *Kramer* teaches replacing a packet with an empty packet. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above-mentioned limitation. In particular, one skilled in the art would be motivated to replace the packet with an empty packet to further insert silence. *Kramer* provides the above motivation at e.g., column 9, lines 45-60.

***Allowable Subject Matter***

5. **Claims 17 and 18** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- **US006452950B1** anticipates at least the independent claims where the “reproduction errors” are “lost packets”, see e.g., column 2, lines 27-42 and column 7, lines 13-24.
- **US 20020101885A1** anticipates at least the independent claims in that although the buffer size is based on the likelihood of subsequent burst periods (i.e., talks spurts), late arriving packets (i.e., reproduction errors) are still taken into consideration when adjusting the buffer size, see e.g., paragraph 0049 on page 3.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123.

The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DWF

Derrick W. Ferris  
Examiner  
Art Unit 2663

  
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10/12/04